

EXHIBIT E

JOHN CONNOLLY, PhD-2, 5-12-09

Page 1

1 IN THE UNITED STATES DISTRICT COURT FOR THE
 2 NORTHERN DISTRICT OF OKLAHOMA
 3

4 W. A. DREW EDMONDSON, in his)
 5 capacity as ATTORNEY GENERAL)
 6 OF THE STATE OF OKLAHOMA and)
 7 OKLAHOMA SECRETARY OF THE)
 8 ENVIRONMENT C. MILES TOLBERT,)
 9 in his capacity as the)
 10 TRUSTEE FOR NATURAL RESOURCES)
 11 FOR THE STATE OF OKLAHOMA,)

12 Plaintiff,)

13 vs.)

14 TYSON FOODS, INC., et al,)

15 Defendants.)

4:05-CV-00329-TCK-SAJ

16 - - - - -
 17 THE VIDEOTAPED DEPOSITION OF

18 JOHN CONNOLLY-2, produced as a witness on behalf
 19 of the Plaintiff in the above styled and numbered
 20 cause, taken on the 12th day of May, 2009, in the
 21 City of Tulsa, County of Tulsa, State of Oklahoma,
 22 before me, Lisa A. Steinmeyer, a Certified Shorthand
 23 Reporter, duly certified under and by virtue of the
 24 laws of the State of Oklahoma.
 25

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Page 6

1 Q Okay. So there's nothing new to update your
2 CV with; we're still operating on your existing CV
3 you provided with your first report?

4 A Yes.

5 Q Okay, sir. Would you tell the court, give the 08:09AM
6 court your educational background concerning survey
7 design?

8 A What type of survey?

9 Q Well, public opinion surveys. What education
10 do you have in the area of public opinion surveys? 08:10AM

11 A I have none.

12 Q Okay. Do you have any experience with taking
13 public opinion surveys?

14 A No.

15 Q Do you have any experience with designing a 08:10AM
16 public opinion survey?

17 A No.

18 Q Okay. Do you understand that part of the
19 damages analysis provided by the plaintiff's damages
20 experts involved a public opinion survey? 08:10AM

21 A I do.

22 Q Now, what about, do you have any experience
23 with regard to survey implementation, that is, how
24 do you go about implementing a public opinion
25 survey? 08:11AM

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1 A No.

2 Q Do you know what contingent valuation is?

3 A Yes.

4 Q What is contingent valuation?

5 A It is the value presumed to be placed on a 08:11AM
6 resource by people who are not directly associated
7 with that resource but may derive some value from it
8 nonetheless.

9 Q Okay, and what is your experience with regard
10 to contingent valuation? 08:11AM

11 A I've been involved in at least one project,
12 perhaps two, where contingent valuation surveys were
13 conducted.

14 Q And were you part of the team that conducted
15 the studies? 08:11AM

16 A No.

17 Q Could you tell the court your experience in --
18 let's talk about education in economics. What
19 formal education and course work do you have in
20 economics? 08:12AM

21 A I'm trying to remember if I took a business
22 course as part of my undergraduate. I don't recall.
23 But that would be the total of it.

24 Q It would be one undergraduate lower division
25 course in economics? 08:12AM

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1 A Yes, but let me back up a little bit because I
2 also took as an upper level undergraduate course a
3 course in engineering economics.

4 Q Okay. Have you done any formal education in
5 environmental economics?

08:12AM

6 A No.

7 Q Do you have any experience in economic
8 practice or theory?

9 MR. JORGENSEN: Object to the form.

10 A The only experience I have related to
11 economics has to do with my own personal finances as
12 well as the economics associated with my company.

08:13AM

13 Q So you wouldn't consider yourself an expert in
14 the field of economics, would you?

15 A No.

08:13AM

16 Q Would you consider yourself an expert in the
17 area of public opinion surveys?

18 A No.

19 Q What can you tell me about the education of
20 Dr. Coale when it comes to public opinion surveys?

08:13AM

21 A I'm not familiar with Dr. Coale's educational
22 background, so I can't comment one way or another.

23 Q Can you affirmatively state that he's received
24 formal education in the area of survey
25 implementation and design?

08:14AM

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1 A I have no understanding one way or the other.

2 Q And what about with Dr. Sullivan; the same
3 question; what can you state with regard to Dr.
4 Sullivan's expertise in the area of survey
5 implementation, that is, public opinion survey
6 implementation and design?

08:14AM

7 A I'm unaware of Dr. Sullivan's education or
8 experience in this area.

9 Q Have you reviewed Dr. Coale's CV?

10 A I don't recall.

08:14AM

11 Q Okay. Have you reviewed Dr. Sullivan's CV?

12 A I may have.

13 Q Have you worked with either Dr. Coale or Dr.
14 Sullivan sufficiently to understand their areas of
15 professional expertise?

08:14AM

16 A I've worked with them sufficiently to
17 understand that they have particular expertise but
18 not the scope, full scope of their expertise.

19 Q Do you understand that either Dr. Coale or Dr.
20 Sullivan have professional expertise in the area of
21 public opinion surveys?

08:15AM

22 A Again, I don't know one way or the other.

23 Q Okay. What about with regard to economics; do
24 you know whether or not either Dr. Coale or Dr.
25 Sullivan have either formal educational training or

08:15AM

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1 professional experience in the areas of economics?

2 A I do not.

3 Q And you said you've been associated with one
4 or maybe two projects that had a contingent
5 valuation study?

08:15AM

6 A Yes.

7 Q And if I use the CV, can we agree that would
8 be an abbreviation for contingent valuation?

9 A Yes.

10 Q Okay, but on both of those studies, you were
11 not involved in the -- with the team that either
12 designed the survey or evaluated its results; is
13 that correct?

08:16AM

14 A Yes.

15 Q And on both of those experiences, you were not
16 involved in the economic evaluation or the damages
17 assessment for those projects, were you?

08:16AM

18 A I was not.

19 Q Do you know whether or not Dr. Coale has any
20 experience at all in being involved with projects
21 involving CV?

08:16AM

22 A I do not.

23 Q The same question for Dr. Sullivan; do you
24 know whether or not he has any experience in the
25 area of contingent valuation?

08:16AM

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1 A I do not.

2 Q Do you know why you were asked to prepare the
3 March 2009 damages report that you co-authored with
4 Dr. Sullivan and Dr. Coale?

5 A Yes. 08:17AM

6 Q Why were you asked to do that?

7 A I was asked to do that because that study
8 relies on certain views and opinions with regard to
9 the state of water quality in the Illinois River
10 watershed, and the efficacy and practicality of 08:17AM
11 using alum as a treatment for phosphorus in the
12 Illinois River watershed, and I have expertise in
13 those areas that allow me to evaluate that work.

14 Q Okay, and do you know how the concept came
15 about for you and Dr. Sullivan and Dr. Coale to 08:18AM
16 prepare such a report that would comment on the
17 water quality in the Illinois River basin as well as
18 the prospect of alum treatment for phosphorus?

19 A I don't understand your question.

20 Q Well, do you know how -- was it your idea; did 08:18AM
21 it come about because you and the other experts
22 decided this would be an appropriate area for you to
23 comment on? What I'm reminding myself I think, Dr.

24 Connolly, in your first deposition I asked you how
25 you came about opining on certain areas and you -- I 08:18AM

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1 Q Did you do anything to prepare yourself for
2 your 2009 report in the area of studying how public
3 opinion surveys are conducted and designed?

4 A No.

5 Q Did you do anything to prepare yourself for 08:22AM
6 the March 2009 report in the area of understanding
7 the economics and damages theory surrounding natural
8 resource damages?

9 A I have a general understanding of that theory
10 because of my involvement in natural resource damage 08:22AM
11 suits, but I did no specific preparation for this
12 report.

13 Q Okay. Did you do any work or studying of the
14 economics associated with willingness to pay and
15 contingent valuation? 08:22AM

16 A No.

17 Q Do you know what the term willingness to pay
18 means in the economic genre?

19 A I believe I have a general understanding of
20 that. 08:23AM

21 Q What's your understanding of that concept?

22 A It is how much money would people be willing
23 to pay, willingness to pay, to improve the condition
24 or resolve a problem, in this sense associated with
25 pollution. 08:23AM

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1 Q Okay, and where did you come about that
2 understanding of the term contingent valuation?

3 MR. JORGENSEN: Objection.

4 A From my work on the Montrose site in southern
5 California.

08:23AM

6 Q Are you familiar with the term counterfactual?

7 MR. JORGENSEN: Object to the form.

8 A No.

9 Q Have you ever heard of the term counterfactual
10 being associated with the concept of going counter
11 to facts usually used in a hypothesis analysis?

08:24AM

12 MR. JORGENSEN: Object to the form.

13 A No.

14 Q Do you know whether or not CV scenarios, that
15 is, scenarios that are associated with a survey,
16 often use solutions that are counterfactual?

08:24AM

17 MR. JORGENSEN: Objection.

18 A No.

19 Q So you wouldn't be able to tell the court or
20 the jury how often counterfactual scenarios are used
21 in contingent valuation surveys, would you?

08:24AM

22 A No.

23 Q Do you know what the purpose of a scenario
24 providing a scenario in a CV survey -- let me
25 restate that. Strike that question. Do you have an

08:25AM

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1 understanding of the basis and purpose for providing
2 a scenario to the respondents in a CV survey?

3 A I believe so.

4 Q And what is that?

5 A To provide them a context for determining 08:25AM
6 willingness to pay.

7 Q Have you ever studied the NOAA guidelines
8 concerning contingent valuation?

9 A I may have. I'm uncertain.

10 Q For this particular work you've done in this 08:26AM
11 case, have you reviewed any NOAA guidelines on
12 contingent valuation?

13 A No.

14 Q Are you aware of a document called the NOAA
15 blue ribbon panel findings on contingent valuation? 08:26AM

16 A Yes.

17 Q Have you reviewed those findings?

18 A No.

19 Q Do you know anything about economic theory in
20 the area -- well, let me strike that. Do you know 08:26AM
21 how economic theory handles the fact that people
22 make economic choices with imperfect information?

23 MR. JORGENSEN: Objection.

24 A No.

25 Q Do you know how economists handle the issue 08:26AM

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1 that people make economic decisions with imperfect
2 information?

3 A No.

4 Q Do you know how economists handle the issue of
5 people making decisions with imperfect information
6 when they're analyzing revealed preference data?

08:27AM

7 MR. JORGENSEN: Objection.

8 A No.

9 Q Do you know how economists handle the issue
10 that people make decisions, economic decisions with
11 imperfect data when they're analyzing stated
12 preference data?

08:27AM

13 MR. JORGENSEN: Objection.

14 A No.

15 Q Do you know what the term revealed preference
16 refers to in economic jargon?

08:27AM

17 MR. JORGENSEN: Objection.

18 A No.

19 Q Do you know what the term stated preference
20 refers to in economic jargon?

08:28AM

21 MR. JORGENSEN: Objection.

22 A No.

23 Q Do you know how economists go about -- excuse
24 me. Do you know how surveyors determine whether
25 respondents find a CV scenario plausible?

08:28AM

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1 MR. JORGENSEN: Objection.

2 A No.

3 Q Do you know how economists determine whether
4 respondents to a survey find the CV scenario
5 plausible?

08:28AM

6 MR. JORGENSEN: Objection.

7 A No.

8 Q Do you have an understanding of what the
9 Stratus CV -- and when I refer to the Stratus CV,
10 I'm referring to the overall plaintiff's damage
11 report that was submitted by Stratus as a cover for
12 multiple individuals, such as Dr. Bishop, Dr.
13 Hanemann, Dr. Krosnick. Okay?

08:28AM

14 A Yes.

15 Q So do you know whether -- what the Stratus CV
16 survey was designed to measure?

08:29AM

17 MR. JORGENSEN: Objection.

18 MR. PAGE: What's the basis of your
19 objection?

20 MR. JORGENSEN: I think the question is
21 confusing and contains terms that haven't been
22 defined.

08:29AM

23 MR. PAGE: Go ahead.

24 (Whereupon, the court reporter read
25 back the previous question.)

08:29AM

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1 A I believe so.

2 Q What was it designed to measure in your
3 understanding?

4 A My understanding, it was designed to measure
5 willingness to pay for a perceived increase or
6 improvement in water quality in the Illinois River
7 and Lake Tenkiller.

08:29AM

8 Q Do you know to what degree the survey
9 respondents for the Stratus CV survey found the
10 hypothetical remedy plausible?

08:30AM

11 A No.

12 Q Do you know on the basis of contingent
13 valuation studies how respondent views about a CV
14 scenario's plausibility affect their willingness to
15 pay?

08:30AM

16 MR. JORGENSEN: Objection.

17 A No.

18 Q Do you have any understanding of the
19 recommended level of understanding for survey
20 design, that is, for survey question design?

08:30AM

21 A Whose level of understanding?

22 Q The respondent, the person that's taking the
23 survey. Do you understand what their level of
24 understanding should be for a design of a survey?

25 A I have an opinion of what it should be, but

08:31AM

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1 I'm unaware if there is an objective standard as to
2 what it should be.

3 Q Okay. What is your opinion?

4 A My opinion is that they should have --
5 understand the benefit that would be derived by the
6 expenditure of the funds.

08:31AM

7 Q Do you know for survey design what the
8 recommended reading level, that is, to what reading
9 level do you design your questions for the
10 respondent?

08:32AM

11 MR. JORGENSEN: Objection.

12 A No.

13 Q Assume for the purposes of the next question
14 that an eighth grade reading level is the
15 recommended standard in public opinion for the
16 United States. If eighth grade reading level is the
17 recommended reading level for surveys, is it
18 plausible to put in a survey all of the details that
19 you critique as omitted in your March 2009 report?

08:32AM

20 A The critique in my 2009 report does not have
21 to do with details omitted but has to do with
22 misrepresentation of fact.

08:32AM

23 Q And is that important to the validity of a CV
24 survey?

25 A I believe so.

08:33AM

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1 Q And what education or experience in survey
2 design do you have to give that opinion?

3 MR. JORGENSEN: Objection.

4 A None.

5 Q Have you ever voted in a statewide referendum 08:33AM
6 personally?

7 MR. JORGENSEN: Objection.

8 A Not that I recall.

9 Q You've never voted on a proposition?

10 A Well, I'm sorry. Let me take that back. I've 08:33AM
11 voted on propositions and referendums as part of a
12 general election, not as part of a special
13 referendum.

14 Q What I'm talking about is just have you ever
15 been to an election process, whether it's a 08:33AM
16 presidential or state election, where there are
17 state propositions or referendums that you are
18 voting on as part of the process?

19 A Yes.

20 Q Okay, and when you voted on those 08:33AM
21 propositions, did you know all of the details of the
22 program that was the subject of the referendum you
23 were voting on?

24 MR. JORGENSEN: Objection.

25 A Not in all cases. 08:34AM

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1 A Not that I can recall.

2 Q Can you provide an example of any CV survey
3 that had all the details of the program discussed in
4 the survey?

5 A No. 08:37AM

6 Q Are all CV surveys hypotheticals?

7 A I don't believe so.

8 Q And what's your basis for that belief?

9 A That in certain natural resource damage
10 assessments, the assessment of damage and the 08:37AM

11 assessment of what is feasible and practical to
12 address that damage is clear, so that a survey would
13 describe what is actually believed to be the
14 effective solution, so that there would be cases
15 where what was proposed is not a pure hypothetical 08:38AM
16 but is factual and based upon current understanding.

17 Q Okay. I'm just talking about contingent
18 valuation surveys.

19 A Yes.

20 Q Are you aware of any contingent valuation 08:38AM
21 surveys that are not based on a hypothetical
22 scenario?

23 MR. JORGENSEN: Objection, asked and
24 answered.

25 A I can't offer any specific examples. 08:38AM

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1 been any definitive conclusions yet.

2 Q Okay. Has there been any restoration projects
3 considered?

4 A Not to my knowledge.

5 Q Have you personally been involved in any 09:02AM
6 projects relating to restoration of a lake or
7 reservoir using aluminum sulfate or some other type
8 of alum or aluminum product?

9 A I have not.

10 Q So your knowledge of the effectiveness of 09:02AM
11 aluminum sulfate on a reservoir or lake is based on
12 reviewing the work of other published investigators?

13 A Yes.

14 Q And from reading your report, the sense I get
15 is you relied primarily on Dr. Cooke's book, did you 09:03AM
16 not, Dr. Cooke who is one of the plaintiff's experts
17 in this case?

18 A Dr. Cooke's book contains a significant amount
19 of information with regard to the use of alum, and I
20 certainly consulted his text. My knowledge of alum 09:03AM
21 treatment effectiveness goes beyond that to more
22 general literature, but Dr. Cooke's book does a nice
23 job of summarizing a lot of literature, and so it
24 was convenient as a reference for this work.

25 Q Do you know, sir, whether or not Jennifer 09:03AM

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1 Benaman or Elaine Darby have been involved in any
2 lake or reservoir restoration projects where alum
3 was employed?

4 A Not to my knowledge.

5 Q And what about your junior staff, Casey and
6 Raghav Narayanan?

09:04AM

7 A Narayanan.

8 Q Narayanan, okay. Do you know whether he's
9 been involved or she's been involved?

10 A Not to my knowledge.

09:04AM

11 Q Okay. Now, would you tell me -- you mentioned
12 you had been involved in a number of projects
13 involving rivers and streams. Can you tell me the
14 type of water quality problems that you were
15 investigating and giving advice on in certain rivers
16 and streams restorations?

09:04AM

17 A The vast majority of my work in rivers and
18 streams relates to toxic chemicals and restoration
19 of rivers and streams from toxic chemical pollution.

20 Q When you refer to toxic chemicals, you are
21 referring to something like PCBs or mercury, heavy
22 metal or some kind of a synthetic organic compound?

09:05AM

23 A Yes.

24 Q So you've not been involved in any river or
25 stream restoration that -- where the concern was

09:05AM

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1 nutrient pollution; is that correct?

2 A Not that I recall.

3 Q Do you know whether or not either Jennifer or
4 Elaine, your colleagues, have been involved in river
5 or stream restoration where there was a nutrient
6 pollution?

09:05AM

7 A I'm uncertain.

8 Q Do you know whether or not Dr. Sullivan has
9 been involved in any restoration projects involving
10 lakes or reservoirs?

09:05AM

11 A I do not.

12 Q And what about Dr. Sullivan's experience with
13 restoration of streams or rivers; do you know
14 whether he has any experience in that area?

15 A I do not.

09:06AM

16 Q Let's take a morning break, please.

17 VIDEOGRAPHER: We are off the Record. The
18 time is 9:05 a.m.

19 (Following a short recess at 9:05 a.m.,
20 proceedings continued on the Record at 9:15 a.m.)

09:15AM

21 VIDEOGRAPHER: We are back on the Record.
22 The time is 9:15 a.m.

23 Q Dr. Connolly, I'd like to ask you a general
24 question about Exhibit 1, your report, your March
25 2009 report. When you were doing your evaluations

09:15AM

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1 would you read that, please, beginning with
2 furthermore?

3 A Furthermore, respondents were not made aware
4 that the presented solution had no scientific or
5 technical basis, i.e., there were no site-specific
6 analysis to support the claims made in the survey.

09:28AM

7 Q So when you used the word no scientific or
8 technical basis, you're -- you're not really saying
9 there's no scientific or technical basis; you're
10 saying there was no site-specific analysis to see
11 whether or not the alum treatments would be
12 effective in the IRW; correct?

09:28AM

13 A In part.

14 Q Okay. Are you really saying that there's no
15 scientific basis for the alum analysis done
16 whatsoever?

09:29AM

17 A No. What I'm saying is that there is no
18 scientific or technical basis for the conclusion
19 that the application of alum in this system would
20 bring this system to pristine conditions and
21 accelerate that by something like 40 years over what
22 would occur if you did not apply alum.

09:29AM

23 Q And is that important to determine willingness
24 to pay on a contingent valuation survey?

25 A In my view, yes.

09:29AM

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1 Q And what education or experience do you have
2 in survey design or economics that gives you a basis
3 to render such an opinion?

4 A The -- I'm sorry, the Stratus report itself
5 provides that information because the Stratus report 09:30AM
6 itself indicates that people's willingness to pay
7 was dependent upon their perception about the impact
8 of the hypothetical scenario and its ability to
9 accelerate a recovery of the system as it was
10 portrayed. To the extent that there's no basis for 09:30AM
11 that proposed acceleration of recovery, it would
12 clearly impact people's willingness to pay.

13 Q If the people don't know whether or not
14 there's a basis, what difference does it make
15 whether or not there's a scientific basis for the 09:30AM
16 remedy; if they don't know whether there is or is
17 not a scientific basis but they believe it will
18 work, what difference does that have on their
19 willingness to pay?

20 MR. JORGENSEN: Objection. 09:30AM

21 A I would be willing to pay a lot of money if
22 someone came to me and said we can cure cancer. If
23 you're just willing to pay us some money, we can
24 cure cancer. If it turns out they're telling me a
25 story because there's no scientific basis to support 09:31AM

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1 watershed and to Lake Tenkiller, the survey is not
2 valid and its CV estimate is, therefore,
3 meaningless.

4 Q So you're writing an opinion on the survey
5 validity in the CV estimate there; correct?

09:32AM

6 A Yes.

7 Q It's meaningless?

8 A Yes.

9 Q And what training do you have in environmental
10 economics that allows you to offer an opinion that
11 the CV estimate is meaningless?

09:32AM

12 A All that's needed here is common sense. I
13 don't have the specific training you're referring
14 to, but I believe that training is not necessary to
15 make this conclusion given the information at hand.

09:33AM

16 Q Let's look at the second bullet on Page 2.
17 Would you read that, please?

18 A It falsely states that attaining the
19 conditions that existed in 1960 is a possible and
20 desirable goal, given the large changes that have
21 occurred in human population in the watershed, and
22 assumes we know what the conditions were in 1960
23 that need to be attained.

09:33AM

24 Q Okay. What do you mean by what falsely
25 states; what are you referring to there; what are

09:33AM

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Page 60

1 A Yes.

2 Q Okay. Anything else that you want to identify
3 as implying that it was a desirable goal?

4 A I'm sure there are some other things in here.

5 Those are the two that I found quickly paging 09:44AM
6 through it.

7 Q But basically you mean to say I guess on Page
8 2 is that the report implies that attaining
9 conditions that existed in 1960 is a possible and
10 desirable goal rather than states; is that your 09:44AM
11 testimony, sir?

12 A Yes.

13 Q The Footnote No. 1 at the bottom of Page 2 of
14 the report, there's a sentence that reads thus.
15 Would you read that for the Record, sir? 09:45AM

16 A Thus, the net result of the plaintiff's
17 overexaggeration of the possible effectiveness of
18 their proposed solution would be to overexaggerate
19 how much those respondents would be willing to pay
20 to implement that solution. 09:45AM

21 Q Okay. What economic training do you have that
22 allows you to offer that opinion to the court?

23 A It does not require economic training. It
24 requires an understanding of statistics correlation.
25 That statement is based upon Stratus' own statement 09:45AM

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1 about a correlation between willingness to pay and
2 efficacy.

3 Q What studies have you evaluated in the area of
4 contingent valuation that would support your
5 statement that you just read for the Record?

09:46AM

6 A I don't think I understand your question.

7 Q Well, you're claiming that your view that
8 there was an overexaggeration of the possible
9 effectiveness, how do you know that would affect the
10 parties' willingness to pay?

09:46AM

11 A Because Stratus stated that.

12 Q Okay, and so was it their goal then to
13 evaluate the willingness of implementing the remedy
14 or to determine what the value of the lost services,
15 that is, the value of the lost water quality in the
16 system?

09:47AM

17 A My view is is what they were asking people was
18 not the value of the lost services but the value of
19 some perceived acceleration in recovery, and I think
20 those are different.

09:47AM

21 Q And you don't think that then goes to what the
22 people -- how the people value the improved water
23 quality; isn't that what Stratus is trying to get at
24 here, the economists, what is the value of the lost
25 natural resources, assuming that the plaintiff's

09:47AM

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1 scenarios are correct, that there has been an impact
2 on natural resources water quality between 1960 and
3 the present day. Isn't the measure for natural
4 resource damages the value of those lost services?

5 A And in my view, the way they framed this, 09:47AM
6 that's not what they got.

7 Q You don't have any economic papers that you
8 can offer the court that would support your
9 viewpoint of the survey methodology?

10 A No. 09:48AM

11 Q On Page 3, would you read the first bullet
12 point, sir?

13 A It ignores the many sources of phosphorus that
14 would not be impacted by the presented solution and
15 gives the false impression that poultry litter is 09:48AM
16 the sole or even a major reason for the alleged
17 injuries.

18 Q We just were looking at Exhibit No. 2, the
19 survey on Page 13, where the survey instrument
20 actually referred to other sources of phosphorus in 09:49AM
21 the system, did it not?

22 A Yes.

23 Q So what's your basis for your statement that
24 poultry litter is the sole reason for the alleged
25 injuries? 09:49AM

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1 Q And how do you know that, sir? Did you do any
2 documents or studies of the respondents that would
3 indicate that that's what the people were thinking?

4 A That's simply my personal opinion.

5 Q Let's look at the second bullet on Page 3, 09:55AM
6 sir. Would you read that, sir, for the Record?

7 A It does not acknowledge that there has been no
8 work done by the plaintiffs to evaluate the
9 feasibility, efficacy or collateral impacts, e.g.,
10 negative effects on biota, water quality, general 09:56AM
11 stakeholder reaction, et cetera, of the presented
12 solution.

13 Q Okay, and why is such an acknowledgment
14 important to a contingent valuation survey?

15 MR. JORGENSEN: Objection. 09:56AM

16 A Because people's willingness to pay depends on
17 their understanding tradeoffs, and the idea that
18 alum could be applied and there are no issues here,
19 we put alum down, problem goes away, as opposed to
20 there are impacts here to society, there are impacts 09:57AM
21 here to use of the watershed, and people's value
22 system includes balancing, and they are not provided
23 the information here to do the proper balancing in
24 order to understand what they are getting if they
25 commit funds. 09:57AM

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1 Q You would agree with me, would you not, Dr.
2 Connolly, that your understanding of restoration,
3 using alum, is much, much greater than the typical
4 survey respondent?

5 A Yes.

09:58AM

6 Q Okay, and so if the people believed that the
7 alum would work without these other implications,
8 why is it important to a survey, a CV survey that
9 all these other implications be provided to the
10 respondents?

09:58AM

11 A Because in my view, people would either be
12 willing to pay less or not be willing to pay at all
13 if they understood that they are making a tradeoff
14 here between certain things that they desire.

15 Q But that would be more of a referendum on
16 whether or not we want to use this remedy rather
17 than the value of the resources lost, would it not?
18 That kind of information would be important if there
19 was a referendum being proposed as to whether or not
20 we should use this particular remedy but not
21 necessary to determine whether or not the people --
22 how the people value their resource that was lost;
23 do you agree with that?

09:58AM

09:59AM

24 A The people are not being asked how they value
25 the resource. They're simply being asked would they

09:59AM

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1 be willing to pay money for something to happen.

2 Q That achieves improvement in water quality
3 back to 1960s conditions; correct?

4 A At what cost? People's value -- my belief and
5 view is that people's values here are based upon
6 tradeoffs, and that it's not appropriate to try to
7 value something in the abstract without any
8 understanding of perspective.

09:59AM

9 Q Okay. Do you have any published information
10 or experience on CV surveys that would support your
11 viewpoint that all that type of information, an
12 acknowledgment is necessary for a CV survey as shown
13 on Page 3, Bullet 2?

10:00AM

14 MR. JORGENSEN: Objection.

15 A I've done no such literature review.

10:00AM

16 Q Your fourth bullet point, would you read that
17 for the Record, please, sir, on the same page, Page
18 3 of your report?

19 A It does not acknowledge the lack of a
20 scientific basis for the claim that water quality --

10:00AM

21 Q I'm sorry. I'm on the fourth bullet point.

22 A I'm sorry. I read the third one. It does not
23 acknowledge that fertilizer application is needed to
24 maintain the livestock industry in Oklahoma and that
25 commercial fertilizers would have to be used in

10:01AM

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1 representation of the facts. If what was put here
2 was the water in the river used to be clear most of
3 the time, waters are usually relatively clear even
4 today. However, it is sometimes murky. That would
5 have been a clear statement of what Dr. Stevenson
6 had said.

02:04PM

7 Q Okay. You've never actually designed a survey
8 report, sir, or prepared a public opinion survey?

9 A I have not.

10 Q You quote then at the bottom of the page some
11 measurements of benthic algae; correct?

02:04PM

12 A Yes.

13 Q What does the benthic algae measurements have
14 to do with the murkiness or clarity of the water
15 column?

02:04PM

16 A Not a lot except in very, very shallow water,
17 and this is probably a poor way to have stated this,
18 because this is really introducing what comes on the
19 next page, Page 8, and the way it's written here is
20 probably not the best way to have written it, since
21 it does seem to tie it back to the planktonic algae
22 levels and the murkiness.

02:05PM

23 Q Yeah. I mean, you actually lead in by talking
24 about murky conditions and then you quote benthic
25 algae studies.

02:05PM

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1 which tended to show a downward trend, but I admit
2 that it is a fairly weak line of evidence with
3 regard to this but nonetheless is a line of
4 evidence.

5 Q Do you see much difference in the chlorophyll
6 levels in 1986, 1992 and 1993 versus 2005?

02:35PM

7 A I do not. If anything, they are about the
8 same at Lake 04. Perhaps they're a little bit lower
9 at some of the other stations.

10 Q Does water residence time have any impact on
11 phosphorus and chlorophyll levels in the lacustrine
12 sections of Lake Tenkiller?

02:35PM

13 A I believe very little.

14 Q Let's look at the last sentence, just above
15 Section 2.3. Would you read that for the Record,
16 sir?

02:36PM

17 A Because the survey results are based on
18 inaccurate statements regarding the current state of
19 ecological conditions in the Illinois River
20 watershed, the results of that survey that
21 pertain -- I'm sorry, yeah. The results of that
22 survey that pertain to willingness to pay are
23 invalid.

02:36PM

24 Q Okay, and, sir, what economics or survey,
25 public opinion survey, experience or training do you

02:36PM

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1 have that qualify you to give that opinion?

2 A I'm not an economist and I'm not trained in
3 those areas. My opinion is based upon the simple
4 statement that if you inaccurately portray the water
5 quality condition, that you will impact people's
6 willingness to pay as just a logical conclusion.

02:37PM

7 Q And you understand that the cost of
8 willingness to pay is an economics principle?

9 A I do.

10 Q And you've never studied that concept in
11 school or in your professional studies?

02:37PM

12 A No, nor am I representing myself as an expert
13 in that area.

14 Q The last sentence on Page 11, would you read
15 that, sir?

02:38PM

16 A Connolly 2009 also presents substantive
17 analyses that show the conclusion drawn by Fisher
18 2008 and Olsen 2008 regarding poultry litter as a
19 dominant source of phosphorus to the system is not
20 supported by the plaintiff's own data.

02:38PM

21 Q What analysis are you referring to there?

22 A I'm referring to Fisher's attempt to use
23 concentration ratios to argue that what he sees in
24 the river and the lake is traceable to poultry
25 litter, and Olsen's use of a suite of chemicals to

02:38PM

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1 would remediate or restore all of the effects of
2 phosphorus in a watershed?

3 MR. JORGENSEN: Objection.

4 A Again, I'm not an expert on contingent
5 valuation, and I'm not claiming to be one, but it
6 seems to me that you cannot estimate the value of
7 anything in isolation.

02:45PM

8 Q Well, Dr. Connolly, let me ask you this: This
9 is kind of a fundamental thing. Do you know whether
10 or not the Stratus report is a value of the total
11 value for the injury associated with phosphorus or
12 nutrient contribution in the watershed?

02:46PM

13 MR. JORGENSEN: Objection.

14 Q Do you know if it's a measurement of total
15 values as opposed to just a portion of the values
16 from one source?

02:46PM

17 MR. JORGENSEN: Objection.

18 A I don't understand what it represents. In my
19 personal view, having been associated with
20 contingent valuation, I view it all as voodoo
21 science, and I'm not sure what it represents.

02:47PM

22 Q Okay. Your opinion on voodoo science is worth
23 as much as the time you spent studying economics,
24 isn't it?

25 MR. JORGENSEN: Objection, argumentative.

02:47PM

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1 this benefit, forty-year acceleration. So that
2 number becomes very important.

3 Q So if you're trying to determine what the
4 value is of that forty years of good water, the
5 improvement forty years sooner, wouldn't you want to
6 have the people to understand that the water would
7 actually get better so you could value what the
8 forty years of better water is worth?

03:07PM

9 MR. JORGENSEN: Objection. He's already
10 said over and over again that he's not a CV expert.

03:07PM

11 Q Is that your answer, you don't know because
12 you don't do CV?

13 A I'm not a CV expert, no, I'm not. I'm not
14 representing myself as one.

15 Q Footnote 5, bottom of the page, to support
16 such a claim for effectiveness, acceptable
17 scientific practice requires some level of modeling.
18 Do you see that statement, sir?

03:07PM

19 A Yes.

20 Q Wouldn't you also need to do some modeling to
21 determine whether or not it wasn't going to be
22 effective?

03:07PM

23 A You didn't finish what I had written there.
24 It says modeling or empirical analysis.

25 Q Okay.

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1 Q Didn't we actually do that kind of routine in
2 your deposition, that we found at least 35 locations
3 were not influenced by wastewater treatment plants?

4 A That had -- in that case we were looking at
5 density and, yes, there were a number something like
6 that that we came to.

03:11PM

7 Q Let's look at Page 14, sir. The last
8 sentence, would you read that, please?

9 A Without scientific evidence that the
10 forty-year claim is valid, the entire survey results
11 are meaningless.

03:11PM

12 Q Okay. Again, sir, I'm going to ask this
13 question again because you've offered many of these
14 opinions. It's true that you do not have either the
15 education or experience in either economics or
16 survey techniques to support that opinion; is that
17 correct?

03:11PM

18 A Correct. That opinion is based upon my
19 expertise as a scientist and engineer and not as an
20 economist.

03:12PM

21 Q Is it your view that the Stratus consultants
22 were measuring the value of alum treatment?

23 MR. JORGENSEN: Objection.

24 A No.

25 Q Page 15, sir, in the first top paragraph you

03:12PM

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1 provide a criticism that more information should be
2 provided concerning the remedial strategy by Stratus
3 in the survey; is that correct; is that a fair
4 characterization of your statements at the top of
5 Page 15?

03:13PM

6 MR. JORGENSEN: I'm sorry. David, will you
7 repeat the question?

8 MR. PAGE: Maybe Lisa can.

9 (Whereupon, the court reporter read
10 back the previous question.)

03:13PM

11 MR. JORGENSEN: Thank you.

12 A What I mean by what I've written here is that
13 Stratus should have considered and then provided a
14 more accurate and balanced presentation of the
15 scenario. Stratus indicates or implies that this
16 treatment is simple, easy, effective and has
17 essentially no negative impacts, and that's just not
18 true.

03:14PM

19 Q Okay. Do you have any authority, sir, that
20 indicates that a survey, a CV survey will not
21 provide reliable information concerning willingness
22 to pay unless you have the information that you're
23 suggesting on the top of Page 15 within the survey?

03:14PM

24 MR. JORGENSEN: Objection. He said he's
25 not a survey expert.

03:14PM

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1 A And I'm not a survey expert, but it seems to
2 me that to mislead the respondent must have an
3 impact on the results.

4 Q You've never studied any published information
5 about surveys or willingness to pay that indicate
6 that that's an improper methodology?

03:15PM

7 MR. JORGENSEN: Objection.

8 A I have not.

9 Q Bottom of Page 15 --

10 A Uh-huh.

03:15PM

11 Q -- would you read the sentence beginning if
12 the alum dosage?

13 A If the alum dosage is designed to provide for
14 active sorption of sediment phosphorus, the alum
15 blanket is able to absorb phosphorus leaching from
16 the sediment, preventing it from reaching the
17 overlying water column and thereby inactivating the
18 lake's internal cycling of phosphorus.

03:15PM

19 Q Why do you make this statement in this report?

20 A This is part of a general description of how
21 alum treatment typically works and what are the
22 typical goals of alum treatment, one of which is to
23 cut off internal recycling of phosphorus.

03:16PM

24 Q Is that important for this remedial scenario
25 to be accurate in your mind?

03:16PM

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1 State of Oklahoma has proposed alum treatment for
2 the river and lake as a remedial option in this
3 case?

4 A I do not.

5 Q Did you ask anyone?

03:54PM

6 A No.

7 Q Was that important to you?

8 A No.

9 Q Whether or not the State is, actually is
10 proposing the option, it wouldn't be important to
11 your analysis either way?

03:54PM

12 A No.

13 Q Do you have any basis to support your
14 statement on top of Page 23, this statement
15 minimizes and ignores stakeholder concerns with alum
16 treatments, which can impact acceptance and project
17 completion. Do you have any basis to support the
18 fact that that type of information is important in a
19 CV survey?

03:55PM

20 MR. JORGENSEN: Objection. He said he's
21 not a CV expert.

03:55PM

22 A Yeah, and I'm not representing myself as a CV
23 expert.

24 MR. PAGE: This was a damages report,
25 right, that was submitted by the defendants in this

03:55PM

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1 which you operate -- well, let me back up. Strike
2 that. Let me start again. What is the scientific
3 community in which you work?

4 A It is the environmental engineering and
5 science community, particularly the area of water
6 quality and surface water systems. I do a little
7 bit of work on groundwater, but it's almost all
8 lakes, rivers, streams, estuaries, coastal waters.

04:12PM

9 Q Okay. Based on your experience in that
10 scientific community, do you believe that scientific
11 community would consider you qualified to issue the
12 opinions that you've issued in March 2009 report?

04:12PM

13 MR. PAGE: Object to the form.

14 A Yes.

15 Q Based on your experience in that community and
16 your knowledge of their standards, do you consider
17 yourself qualified to issue this opinion?

04:12PM

18 MR. PAGE: Object to form.

19 A Yes.

20 Q Okay. Let me turn to now what you may or may
21 not be an expert in. Are you an expert in
22 contingent valuation?

04:12PM

23 A No.

24 Q Do you hold yourself out as an expert in
25 contingent valuation?

04:13PM

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1 A No.

2 Q In the March 2009 report do you issue any
3 opinions with regard to the design or implementation
4 of a contingent valuation survey?

5 MR. PAGE: Object to the form. 04:13PM

6 A No.

7 MR. JORGENSEN: Would you read that one
8 back?

9 (Whereupon, the court reporter read
10 back the previous question.) 04:13PM

11 MR. JORGENSEN: I'm going to stay with it.

12 MR. PAGE: I think the Record will speak
13 for itself. Thank you.

14 Q What were you addressing in the March 2009
15 report? 04:13PM

16 MR. PAGE: Object to the form.

17 MR. JORGENSEN: Hang on. What's your
18 objection?

19 MR. PAGE: It's ambiguous.

20 MR. JORGENSEN: I'll stay with it. 04:13PM

21 Q What were you addressing in the March 2009
22 report?

23 A I was addressing the representation of water
24 quality in the Illinois River watershed and the
25 ability or lack thereof to alter that water quality 04:14PM

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1 MR. JORGENSEN: I have no further
2 questions.

3 REDIRECT EXAMINATION

4 BY MR. PAGE:

5 Q Dr. Connolly, early on in Mr. Jorgensen's 04:47PM
6 cross examination, he asked you a question to the
7 effect that are you qualified to give all the
8 opinions you give in your report, and you said yes.
9 Do you remember that question?

10 A Yes. 04:47PM

11 Q You're not in any way recanting or changing
12 your testimony today that you do not have
13 qualifications in contingent valuation, economic
14 analysis; correct?

15 A Correct. 04:47PM

16 Q You're not meaning to change that, those
17 statements you made earlier?

18 A No.

19 Q And you're not making any change in your
20 statements that you do not have expertise in public 04:48PM
21 opinion survey design or implementation?

22 A Correct.

23 Q You're not changing any of those testimony you
24 provided earlier today by that broad statement by
25 Mr. Jorgensen's question? 04:48PM